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- (71) Applicant (for all designated States except US): **ELEMENT SIX LIMITED** [GB/GB]; Isle of Man Freeport, Ballasalla, Isle of Man IM99 6AQ (GB).
- (71) Applicant (for MW only): **KEMP, Mark** [ZA/ZA]; Rochester Place, 173 Rivonia Road, 2057 Morningside (ZA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WORT, Christopher, John, Howard** [GB/GB]; 61 Upthorpe Drive, Wantage, Oxfordshire OX12 7DG (GB). **TWITCHEN, Daniel, James** [GB/GB]; 10 Park Drive, Sunningdale, Berkshire SL5 0BD (GB). **SCARSBROOK, Geoffrey, Alan** [GB/GB]; 40 Cavendish Mead, Sunninghill, Ascot, Berkshire SL5 9TD (GB).
- (74) Agents: **DONALD, Heather, June et al.**; Spoor & Fisher, PO Box 41312, 2024 Craighall (ZA).
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(54) Title: METHOD OF MANUFACTURING DIAMOND SUBSTRATES

(57) Abstract: A tiled array of diamond plates, which is suitable for wafer scale processing, for example, in the manufacture of electronic or other device structures on the diamond plates. The diamond plates are fixed to a support layer, preferably a polycrystalline diamond support layer, in a substantially planar arrangement such that at least one of the major surfaces of the respective fixed diamond plates defines a fabrication surface that is exposed for further processing. The support layer may be a backing layer, in which case only one of the major faces of the diamond substrate is exposed for further processing, or may extend between respective diamond substrates such that both major surfaces are exposed for further processing.

WO 2005/010245 A1